Game Changing Development

Composite Cryotank Technologies and Demonstration (CCTD)

Completed Technology Project (2011 - 2014)

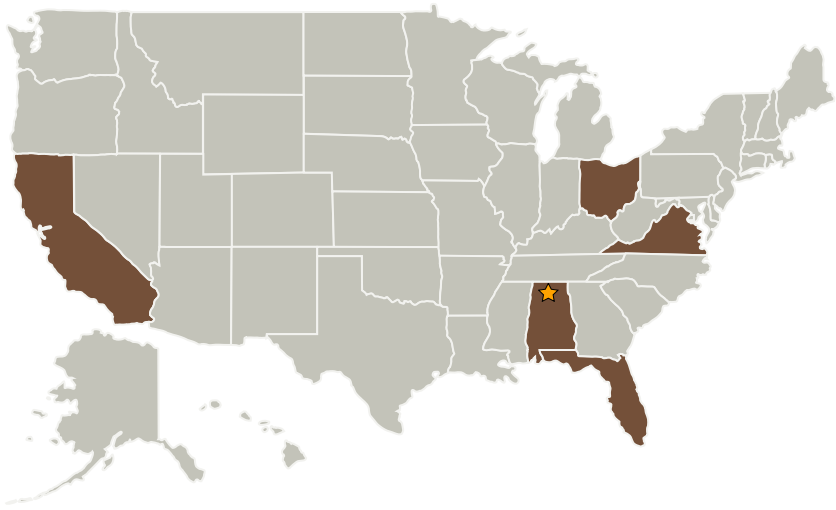
Project Introduction

Advance the technologies for composite cryogenic propellant tanks at diameters suitable for future heavy lift vehicles and other in-space applications with a goal of reducing weight and cost.

Anticipated Benefits

CCTD seeks to develop and demonstrate advanced technologies to reduce cost (25%) and weight (30%) of LH2 composite cryotanks for future NASA missions and commercial launch vehicles.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Marshall Space Flight Center(MSFC)	Lead Organization	NASA Center	Huntsville, Alabama

Primary U.S. Work Locations	
Alabama	California

Continued on following page.

2.4m Composite Cryotank

Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Marshall Space Flight Center (MSFC)

Responsible Program:

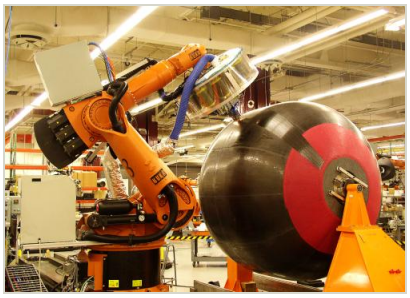
Game Changing Development

Composite Cryotank Technologies and Demonstration (CCTD)

Completed Technology Project (2011 - 2014)

Primary U.S. Work Locations *(cont.)*	
Florida	Ohio
Virginia	

Images



2.4m Composite Cryotank
2.4m Composite Cryotank during AFP
(https://techport.nasa.gov/image/143221)

2.4m Composite Cryotank
2.4m Composite Cryotank
(https://techport.nasa.gov/image/143227)

5.5m Composite Cryotank
5.5m Composite Cryotank Arrives at MSFC for inspection
(https://techport.nasa.gov/image/143207)

Project Management

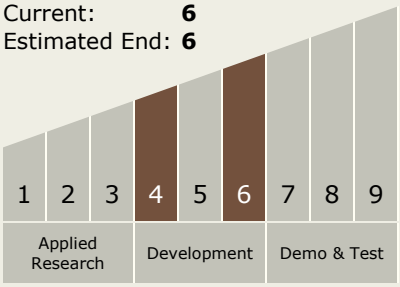
Program Director:
Mary J Werkheiser

Program Manager:
Gary F Meyering

Principal Investigator:
John H Vickers

Technology Maturity (TRL)

Start: **4**
Current: **6**
Estimated End: **6**



Target Destinations

Earth, The Moon, Mars, Others Inside the Solar System

5.5m Tank Model
5.5m Tank Model
(https://techport.nasa.gov/image/143238)